

Radio Observatory

Herrick Archives Building 144

A. IDENTIFICATION & LOCATION

1. Name

1.1 Never officially named by Board of Trustees action.

1.2 Alternate names noted:

Radio Telescope

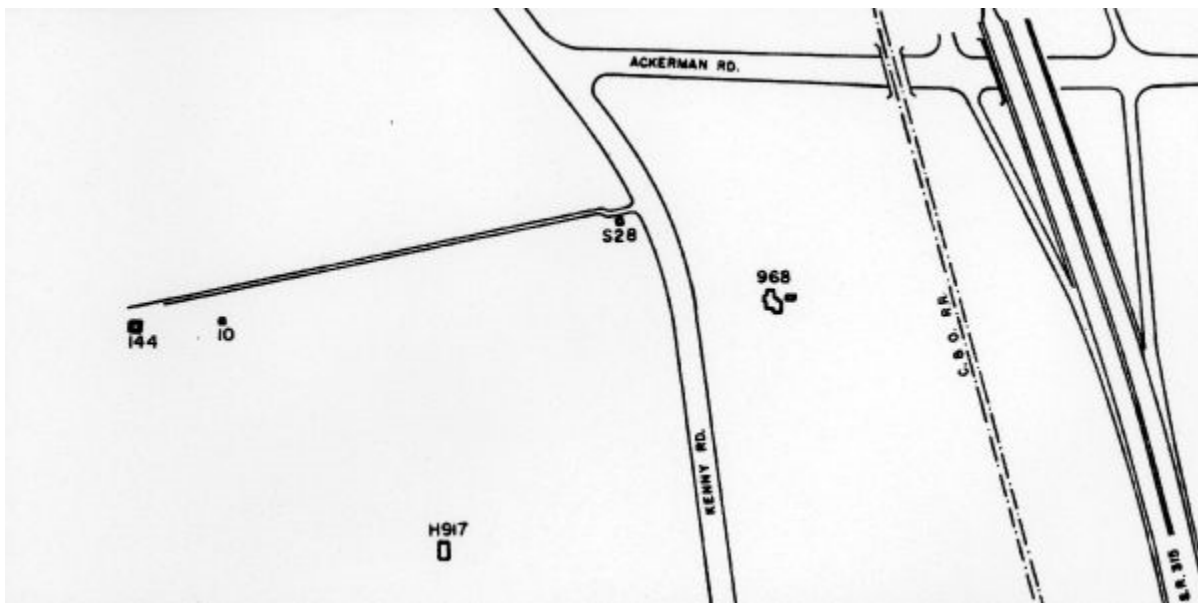
Antenna Laboratory Field House

See Addendum No. 2,3

2. Location

2.1 Located at 2827 Kenny Road. See map below.

2.2 For greater detail, see Sheet 17 in the book of campus maps in the University Archives.



For identification of other buildings shown, see Appendix A.

3. General Description

3.1 Type of construction:

A concrete block building approximately 17' x 23' and several large antennae of various types.

3.2 No. of stories:

One.

3.3 Increments of construction:

This development was completed over a period of several years, chiefly by student and faculty labor. See Part B.

3.4 Present area of building as shown in inventory records of Office of Campus Planning:

440 sq. ft. gross; 367 sq. ft. net assignable

3.5 Volume of Building:

960 cu. ft. (PP).

B. PLANNING & CONSTRUCTION

This work was done largely by students and faculty in the Department of Electrical Engineering under the leadership of Dr. John Kraus. A pamphlet by E. E. Dreese, Chairman of the Department, entitled Radio Observatory Report No. 3 dated May 10, 1955 reports the early history of the project. According to Dreese, the project began in the fall of 1951 with tests. By late summer of 1952 an array of 12 helical antennae had been erected and the receiving equipment was placed in a trailer. Observations began on August 1, 1952. By November, 1952 there was 48 helices in place, and 48 more were installed during the summer and fall of 1953.

Date of construction of the building to replace the trailer has not been determined, but the building does appear in a December 12, 1953 photograph (X 12064).

In addition to the building and the helical antenna 160 feet long there were two other antennae to the east - a 40 feet parabolic dish, completed in 1956, and a 35 feet rotating corner reflector. There was also a smaller circular antenna west of the building. All of these antennae are shown in photograph X 12063 (1959).

See Addendum No. 1

C. COST

The initial project was supported by a \$20,000 grant from the Development Fund. No attempt has been made to determine the total cost.

D. DEMOLITION

See Addendum No. 4

The building still remains, well hidden by trees, and is likely soon to be removed. Air View 264 (May, 1961) shows the helical antennae still in place. John Kraus does not recall the date operations ceased at this site, but is sure that it was prior to 1965, probably in 1963 or 1964. Operations were shifted gradually to the new facility behind Perkins Observatory at Delaware, construction of which began in 1959.

E. PHOTOGRAPHS

1. In Photoarchives:

X 12065 is a good overall view (probably 1958)

X 12063 shows all of the antennae (1959)

X 12064 shows the building

X 12066 shows the first section of the helical antenna and the trailer (1952)

John H. Herrick

April 18, 1976

ADDENDUM NO. 1

Professor John Kraus describes the development of this project, and its successor at Stratford, in a book entitled Big Ear published in 1976 by Cygnus - Quasar Books of Powell, Ohio. A copy of this book is in the University Archives.

This account reports the following dates:

1. May 1952 -- Receiver had been installed in a trailer.
2. August 1, 1952 -- six helixes had been connected to receiver. This confirms Drees's statement that observations began August 1, 1952.
3. The building was constructed by Electrical Engineering personnel without University approval. John Kraus himself laid concrete block. By the summer of 1954 the building had been completed and the equipment moved into it (p.104).

This account includes on page 104 a good picture of the building and antennae from the west.

John H. Herrick
February 14, 1977

ADDENDUM NO. 2

Cabinet minutes for April 17, 1952 refer to this building, probably incorrectly, as the Kraus Radar Laboratory.

John H. Herrick
June 28, 1978

ADDENDUM NO. 3

Old Campus Planning records refer to this building as "Electro Science Laboratory Field House."

John H. Herrick
July 24, 1979

ADDENDUM NO. 4

This building still stands, completely hidden by trees.

John H. Herrick
August 15, 1979

ADDENDUM NO. 5

Some old Campus Planning maps inadvertantly refer to this building as No. 10.

John H. Herrick
September 28, 1981